

## Coming to Utah Public Health Laboratories

July 1, 2007

### QuantiFERON®-TB (QTF) Gold Tuberculosis Testing

**Fee \$40.00/test**

**Blood must be received at UPHL Monday-Thursday before 2 PM**

#### **What it is:**

This is an in-vitro diagnostic test use as an indirect test for *Mycobacterium tuberculosis* (MTB) infection (including disease). QTF is a cell-mediated immune response test used to detect MTB by measuring gamma-interferon released from a patient's lymphocytes.

QTF may be used in all situations for which the skin test is currently used such as:

- Contact Investigations
- Healthcare Worker Screening
- Evaluation of recent immigrants with BCG vaccination
- Student and employee screening for school and employment requirements
- Immigrants from countries with high prevalence of MTB (with arrival in the USA less than 5 years previous).
- Injection drug users
- Residents and employees of prisons, jails, nursing homes, mental institutions, and homeless shelters

#### **Advantages over traditional PPD Skin Tests:**

- It eliminates the problems of cross-reactivity with non-TB environmental contaminants causing false positive results
- Vaccination with BCG does not affect this test
- Eliminates the need for the patient to return to have the skin test read
- An internal control within the test assesses a patient's ability to mount an immune response
- It is a highly sensitive and specific lab test that reduces many of the false-negative and false-positive readings from skin tests, thus eliminating many unnecessary chest x-rays.
- An actual number is generated that reduces the subjectivity of reading a skin test by various levels of trained staff

**Disadvantages:**

- Blood must be received at the testing laboratory within 12 hours of the blood draw
- Qualified blood drawing staff are necessary
- The cost seems more than the traditional PPD (Cost analysis actually shows the costs are similarly close).

**Interpreting Test Results:**

- Positive – suggests that *M.tb* infection is likely
- Negative – infection is unlikely
- Indeterminate – QFT-G results cannot be interpreted. It is suggested that specimens that are indeterminate have a recall specimen drawn 6 to 8 weeks later.

A diagnosis of LTBI requires that TB disease be excluded by chest x-ray, clinical samples, such as sputum culture or genetic probe. As with all laboratory tests, a negative result does not preclude the presence of infection and clinical judgment is needed to fully evaluate patients suspected.

**QFT Testing at UPHL:**

A minimum of 7 mL (10 mL is preferred) of whole blood draw in a Na Heparin or Li Heparin (Green Top) blood tube is required. We need to get 4 mL of plasma for the test. UPHL does not provide blood drawing supplies or blood drawing services.

Keep the blood at **room temperature** after the draw and during transportation to the laboratory (*this is a departure from usual practices of keeping blood refrigerated or on ice*). The blood must be received at UPHL within 12 hours of the blood draw Monday thru Thursday (excluding holidays). Test will be batched and run on Friday.

Reports will be returned to clients as desired by the client via mail, fax, or email.

There will be a cost of \$40/test in order for UPHL to be able to offer this testing.

More information may be obtained by calling UPHL at 801-584-8400.

We ask that customers call in advance to set up a client account so that UPHL may plan its testing accordingly. Call 801-584-8400 and request to set up an account for QuantiFERON testing. We will need the name of your facility, address, phone, email, fax and how you want your reports returned (e.g. fax, email or mail). Please provide the same contact information for where you would like invoices (billings) sent if it differs from where reports are sent.

More information may also be obtained by calling the Utah Department of Health Tuberculosis Control & Refugee Health Program Office at 801-538-6096  
Visit the Laboratory Website at <http://health.utah.gov/lab/index.html>